

***Amendments to the Claims***

The listing of claims will replace all prior versions and listings of claims in the application.

1.     *(Original)* A vibration isolation system for at least partially damping and isolating vibrations of a body, the system comprising:
  - a plurality of active isolator devices mechanically coupled to the body; and
  - a control system configured to control the active isolator devices, wherein the control system is configured to:
    - decouple vibrations in modal directions;
    - determine a modal compensation signal for each modal direction;
    - recouple each modal compensation signal into an active isolator control signal for each active isolator device; and
    - stabilize at least one unstable natural mode of the body.
2.     *(Original)* The vibration isolation system according to claim 1, wherein the at least one unstable natural mode stabilized by the control system is directed substantially vertically.
3.     *(Original)* The vibration isolation system according to claim 1, wherein the body is positioned on a base frame by air mounts.

4.     (*Original*) The vibration isolation system according to claim 1, wherein a passive isolator device and an active isolator device engage the body at the same location on the body.

5.     (*Original*) The vibration isolation system according to claim 1, wherein the system comprises a plurality of sensors to detect vibrations of the body.

6-20.   (*Canceled*)

21.     (*Withdrawn*) A lithographic apparatus, comprising:

an illumination system configured to provide a beam of radiation;

a support configured to support a patterning device, the patterning device configured to impart the beam with a pattern in its cross-section;

a substrate table configured to hold a substrate;

a projection system configured to project the patterned beam onto a target portion of the substrate; and

a vibration isolation system for at least partially damping and isolating vibrations of the projection system, the system comprising:

a plurality of active isolator devices mechanically coupled to the projection system and a control system configured to control the active isolator devices, wherein the control system is configured to:

decouple vibrations in modal directions;

determine a modal compensation signal for each modal  
direction;

recouple each modal compensation signal into an active  
isolator control signal for each active isolator  
device; and

stabilize at least one unstable natural mode of the body.

22. *(Withdrawn)* An apparatus according to claim 21, wherein the at least one unstable natural mode stabilized by the control system is directed substantially vertically.
23. *(Withdrawn)* An apparatus according to claim 21, wherein the projection system is positioned on a base frame by air mounts.
24. *(Withdrawn)* An apparatus according to claim 21, wherein a passive isolator device and an active isolator device engage the projection system at the same location on the projection system.
25. *(Withdrawn)* An apparatus according to claim 21, further comprising a plurality of sensors to detect vibrations of the projection system.